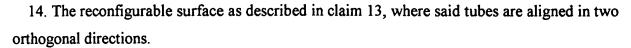
WHAT IS CLAIMED IS:

- 1. A reconfigurable surface, comprising:
 - a flexible surface; and
 - a matrix of rods for contouring said flexible surface to a desired shape.
- 2. The reconfigurable surface as described in claim 1, wherein said flexible surface is supported by the tips of said rods.
- 3. The reconfigurable surface as described in claim 1, wherein each rod of said rods is movable in a vertical direction against said flexible surface and is locked in position when elevated to a predetermined position.
- 4. The reconfigurable surface as described in claim 3, wherein the predetermined position is controlled by a computer.
- 5. The reconfigurable surface as described in claim 3, wherein each rod of said rods is fitted with two pneumatically controlled locks, which release a particular rod to move freely by coincident addressing.
- 6. The reconfigurable surface as described in claim5, said pneumatically controlled locks comprise a first lock for X-coordinate and a second lock for Y-coordinate.
- 7. The reconfigurable surface as described in claim 2, wherein said flexible surface is sucked against said tips.
- 8. The reconfigurable surface as described in claim 7, further comprising a chamber for housing said rods and evacuated for creating a suction to suck said flexible surface against said tips of said rods.
- 9. The reconfigurable surface as described in claim 5, further comprising an elevator, on which rest the bottom ends of said rods which are unlocked.
- 10. The reconfigurable surface as described in claim 9, wherein said elevator is reset at the topmost position with all the locks released.
- 11. The reconfigurable surface as described in claim 10, wherein the rods, which are coincidentally addressed, are locked as the elevator descends.
- 12. The reconfigurable surface as described in claim 3, further comprising inflatable tubes to serve as brakes to lock the rods in position when inflated.
- 13. The reconfigurable surface as described in claim 12, wherein said tubes are aligned in two dimensions for coincident addressing.



- 15. The reconfigurable surface as described in claim 13, further comprising a frame having via holes for guiding said rods, and having horizontal grooves for holding said tubes.
- 16. The reconfigurable surface as described in claim 1, further comprising a second configurable surface to clamp against said configurable surface to serve as a mold for casting molten material.
- 17. The reconfigurable surface as described in claim 1, wherein said reconfigurable surface serves as a contour map.
- 18. The reconfigurable surface as described in claim 7, wherein said flexible surface is sucked against said tips by gravity.
 - 19. The reconfigurable surface as described in claim 1, wherein said flexible surface is air.
- 20. The reconfigurable surface as described in claim 1, wherein reconfigurable surface serves a screen in an image projection system.
- 21. The reconfigurable surface as described in claim 20, further comprising geographical features optically projected from a projector onto said flexible surface, and computer means to correct the offset of horizontal positioning of said features due to the topology of said flexible surface.